

**Amendment to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application.

**Listing of Claims:**

Claim 1 (currently amended): A method for producing a type III antifreeze protein (AFP) which method comprises expressing in a fungal host cell which is deficient in protein glycosylation in comparison to a parent strain, a nucleic acid sequence encoding the AFP

wherein the fungal host cell is *Saccharomyces cerevisiae* ~~a yeast~~ and is deficient in protein mannosyl transferase 1 (pmt1) and/or protein mannosyl transferase 2 (pmt2);

the type III AFP has at least 80% amino acid sequence homology to SEQ ID NO: 1 and is characterized by its ice recrystallization inhibitory activity; ~~and~~

~~the fungal host cell is deficient in protein mannosyl transferase 1 (pmt1) and/or protein mannosyl transferase 2 (pmt2).~~

Claims 2-5 (canceled)

Claim 6 (previously presented): A method according to claim 1 wherein the yeast is a pmt1-deficient mutant strain.

Claim 7 (previously presented): A method according to claim 1 wherein the yeast is a pmt2-deficient mutant strain.

Claim 8 (canceled)

Claim 9 (previously presented): A method according to claim 1 wherein the type III AFP is type III HPLC-12.

Claims 10-11 (canceled)

Claim 12 (previously presented): A method according to claim 6 wherein the yeast is a pmt2-deficient mutant strain.

Claim 13 (canceled)

Claim 14 (currently amended): A method according to claim 1 wherein the type III AFP has at least 90% amino acid sequence homology to SEQ ID NO: 1.

Claim 15 (currently amended): A method according to claim 1 wherein the type III AFP has at least 95% amino acid sequence homology to SEQ ID NO: 1.

Claim 16 (previously presented): A method according to claim 1 wherein the type III AFP comprises SEQ ID NO: 1.

Claim 17 (currently amended): A method for producing a type III HPLC-12 antifreeze protein (AFP) and functional equivalents thereof which exhibit ice recrystallization inhibitory activity having at least 80% amino acid sequence identity with SEQ ID NO: 1 which method comprises expressing in a yeast host cell which is deficient in protein glycosylation in comparison to a parent strain, a nucleic acid sequence encoding the type III HPLC-12 AFP, wherein the yeast is a strain which is deficient in pmt1 and/or pmt2 in comparison to a parent strain, and further wherein the yeast is *Saccharomyces cerevisiae* is a protein-mannosyl transferase 1-deficient and/or a protein-mannosyl transferase 2-deficient strain.

Claim 18 (canceled)